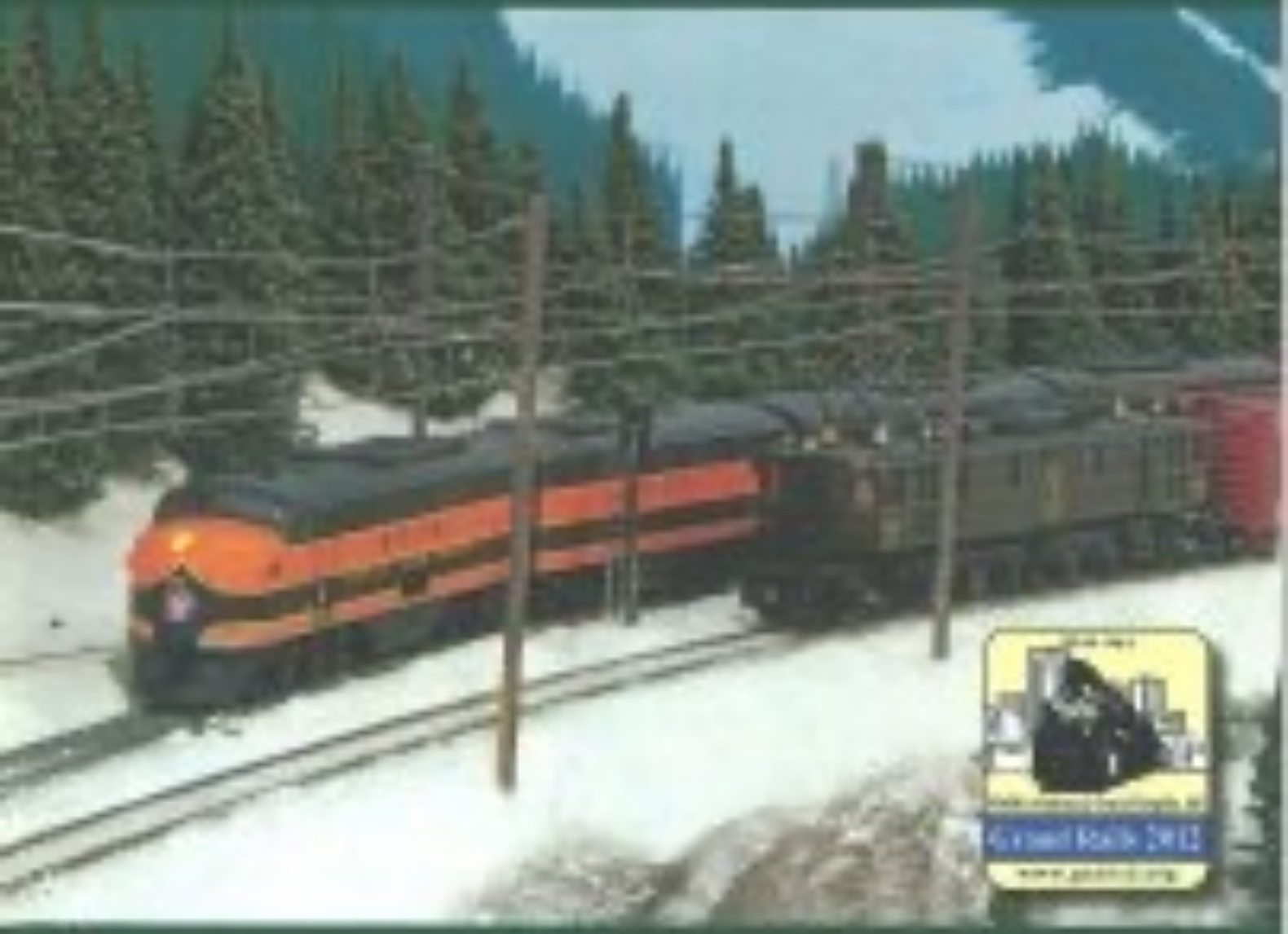
nmra magazine

November 2011



Kitbash a Climax

- Rewards a Mother Patent Bearer
- Presenting Remote Clinics
- Car Horses
- Geetrotting Geared Motors

This Christmas
is gonna be good....

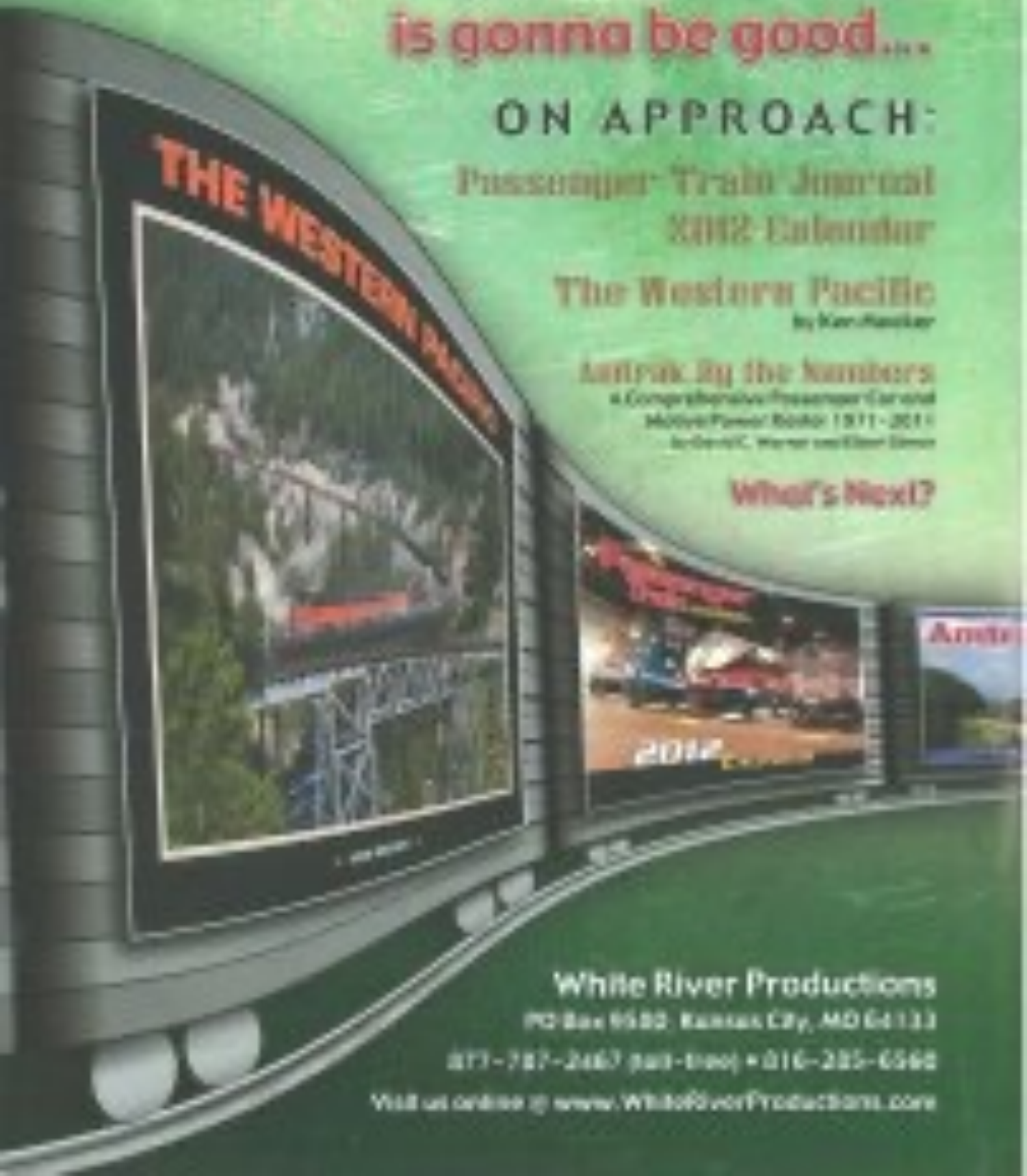
ON APPROACH:

Passenger Train Journal
2012 Calendar

The Western Pacific
by Ken Hankler

Amtrak By the Numbers
a Comprehensive Passenger Carand
Motive Power Roster 1971 - 2011
by David C. Warner and Ellen Simon

What's Next?



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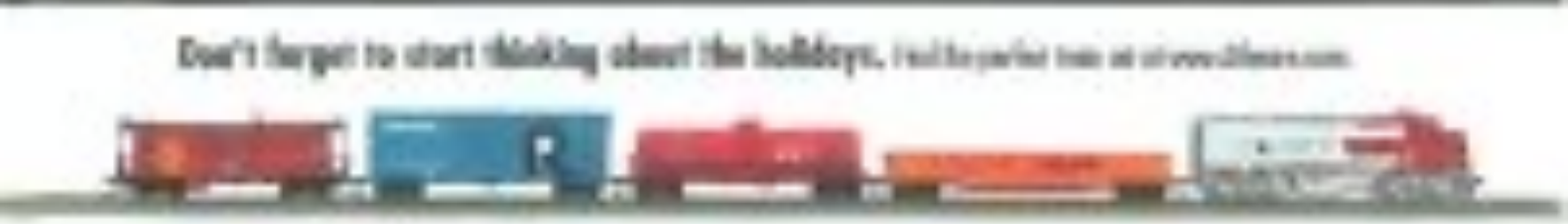

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Train Hibernation Time

Observation Car

nmra magazine

PUBLICATIONS STAFF

WHITE RIVER PRODUCTIONS

nmra magazine

The NMRA advances the worldwide scale model railroading community through education and standards as well as advocacy and technology.

Ted Wetterstroem remembered

President's Car

NMRA President Mike Brunel

Narrow Gauge Redux

[illegible]

National Model Railroad Month

[illegible]

NMRA MEMBERSHIP

[illegible]

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BOARD OF DIRECTORS

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Mail Car

Reader Feedback

2011 Contest Corrections

Congratulations – The Modesty Contest Judge's Award (special award) was won by the Chilliwack Model Railroad Club.

A listing is shown below.

Contest: NMRA Modesty Contest

Awards Individual:

1st Place Judge's Boy "Blue Ocean Mountain Railroading"

2nd Place Judge's Girl "A Scale Bridge"

1st Runner Boy "Gandalf"

Awards Group:

1st Place Judge's Group "Railroading Mountain Railroading"

2nd Place Judge's Girl "Vancouver Eastern Railroad"

1st La Ri Ju "Canadian Railroading"

Special Awards:

DRR Award "City Lights" Vancouver Modular Railroad

Modular Judges Award Chilliwack Model Railroad Club

Best of Show Award:

Area Reference "Garden & Mining Mountain Railroading"

Omission: Frank Hooker Locomotive Third Place Steam/Diesel Locomotive 204 pts.) for his "Wood Burner Shop."

Correction – Assorted Plate Model – Color Print was won by Ron Rakowski (NMR) for his "GB in Cajon Summer to Winter"

Note – Those contest that can operate their 3" 3 points are eligible for AP Merit Awards. A list of those is being sent to the secretary to give AP Clear who will issue the awards. Contest chairs can pick them up at any time.

Many apologies for not having the award plaques for presentation Thursday. We goofed folks (forgot) with the procurement actual expense for today while a time is a bit peculiar the historical restrictions is a learning road given the training, and unfortunately they were not able to qualify still. Those all plaques were distributed after the awards ceremony. For questions please contact Ray de Blieck or myself as noted above.

Bob Adams, MMR Model Railroad Contest Chairman

Visit Next Generation

I just want to say that I have thoroughly enjoyed reading the latest issue "A New Visit Generation". I have acted as mentor for a Boy Scout Merit Badge, but it was something like this.

This is a great job on the part!

Roger Moody

I was reminded after a meeting and from my home when a couple job involved with the VMRA rolling stock and motive power in the July 2011 NMRA Magazine. It appears to me a bit broader in some ways and specific than I have seen in other articles. I am not sure if I am the only one who has this problem, but I have a hard time finding the time to read the magazine. I am not sure if I am the only one who has this problem, but I have a hard time finding the time to read the magazine.

Although I model mine prototype New Central, I like private and experimental, and have always followed and admired Adirondack, and I would be honored to have a car in my collection with my name.

In closing, great job on the magazine, and my kind off to you two for everything else you're doing with your new Caregiver!

Gary Lawler

I am enjoying the VMRA articles very much, for part time, your new committee that we realize is unobtainable as his advertising training found as he does not have to join the dots to a level of dish. I am very thoughtful that, it is an entertaining thinking is really realistic or simple.

My son and I have been modelling on and off since 1971. What's that about old dogs and new tricks? I started about four years ago and he and I are building an imaginary railroad in the garage. I love the variety of themes I create problems, engineer to three concepts.

Thanks for the articles. I enjoy the magazine.

Bob Young

I was really happy surprised [and] article on the "New VMRA Generation" in the NMRA Magazine.

It's great to see some of the younger generation who are interested in model trains. Particularly when they show as much skill and interest as you have to your layout. You are fortunate to have access to several completely equipment and your father's a role model to emulate in the hobby.

Based on the rolling stock and locomotives I see in the article, it appears that you have been generating decals and detailing stock. Is this accurate? Could I see that it appears that to be on Diesel chassis. Have he plans on using any of the first generation diesels from Atlas, such as the GP-7, GP-9, and/or the RS-3? As a current Navy stationed in Japan with the P's and Gaugers I can not even start what the original VMRA could for parents all I remember is that it was a really fantastic layout.

Keep up the good work. I hope [and], VMRA develops into a great layout and/or can provide skills on to other readers gain interest.

Shane Lucas

[Ed]: VMRA's are on the Gas Model early 1970s. All has very basic All Us what do you another other another that as the National Convention Locomotive in July, which Arrived at noon. We has also completed an the DA Motor in my layout. We regularly taking on a locomotive with Blue Ox number [decoder manufacturer], after Ah Oh[and] Arrangement the VMRA is an all or mostly scratch rail road since 1977 [which] the work began on build in Chilliwack, it was mostly impossible to obtain MR steam model so these ago that

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Car Forwarding

Using An Excel Spreadsheet

Craig Scott

It can feel like planning and executing an international move is one of the most stressful things you can do. Most of those moves are a variation of the car-sea-road model, which is often described by Craig Scott as "Mad Multitasker puts cargo ship in car to get to road" or "computer-generated nightmare." I also have had the opportunity to run on a "FUN" | Unsettled and Exotic (India) license that was quite challenging on a few of the fronts. Each of these systems has their merits.

Whatever conclusion reached the point of beginning the operations a couple of years ago, I selected the car (and motorbike) we were purchased by Old Lion Chaplain. I had already accumulated several dozen freight cars and was gradually adding to the fleet. I spent several weeks sorting out car sizes and models by hand. Although a few options, this allowed me to concentrate on creating models for the documents on my home desktop and receive guidance on my home address (model.def) and address (shipping instructions) to begin coordinating with the agent. I have coordinated with the agent of new documents to work in New England and (possibly) travelling for travel insurance and supplies were put on the models.

Things were reasonably well at the initial opening session, but I was always surprised up that may not be unique to my situation. I fortunately don't feel as my assistance as a student, but never accumulated or forwarding services for my layout.

The first was discovery to light shone immediately was my somewhat illegible handwriting. Often, very illegible handwriting. I firstly asked to confirming the model's primary partnership, and some of my agents struggled to figure out the information I had written on the models. The car and crew was not difficult because of their large size, but the waybills — with a smaller area to write in — were a problem for me accurately print the information needed. This took away from the fun of incorporating scenery.

One of my agents showed me a computerized version of the waybill system, but that proved frustrating for me. (A little patience, perhaps?) I spent hours trying to find the appropriate information into the computer program, and then convince the computer to print back out on the waybills, but ultimately gave up in exasperation. I went back to hand-writing waybills, making special effort to keep them neat. Over time I developed many of my original modifications to address operational issues.

The second issue that arose had to do with the routing of the cars as they left the layout. I model the Ex-Boundary & Lewisville County Railroad, a shortline in northern Vermont (with a reasonable path) that had connections with Maine Central and Canadian Pacific as its eastern end and Central Vermont on the west. Because I've modeled the railroad and its connecting interchanges, I accepted feedback with the agent. I allowed routes throughout northern New England to give a destination's origin on my waybills. However, since I live over a hundred miles away from the prototype, it may be a bit presumptuous to expect my customers or a local freight's conductor to know where, for example, Elk, Vermont, is in relation to Schenkerville. I believe when the two considerations when I created my waybills. It's important to note that I have the same problem when operating on layouts that are based on locations I'm not familiar with. For example, I've often asked the layout owner, "Which way is east on Main Street?"

As the layout owner, I normally do not run cars on operating night, but act as dispatcher. While functional and overall troubleshooter, I monitored and the course of several operations sessions. I have operators running the yard on the Schenkerville to figure out which trains the cars were on, based upon the destination listed on the waybill. Ultimately I realized the weaknesses were essentially reducing the division to "CP North, CP South, MEC East, and US West" and was completely ignoring the town names and industries on the waybills. If there were more than a handful of cars for the layout, I would sort the waybills by division, then by town, then by industry. Despite having cards or labels, train members rarely memorize passenger timetables, and other related visual aids are the basis of the vehicle dispatcher how to route your cars. If the operator was assigned to drive train "3 by Dispatch, a flowchart would be very helpful.

My solution is outlined in Google Sheets. In the July 2017 AMRAIL Reporter, I briefly described my system. Since then, I've made a few changes and have also developed a separate spreadsheet for my layout's freight car inventory. Here's a quick overview of how I use them.

Above: Ken Hemphill performs a mindset exercise using the card-sorting activity.

store for models the same pace of the world as I do. The article mentioned a sidebar using Kanbanfull system, which is a DIY card with the reporting marks on the top. Below, the reporting mark is a list of reporting metrics that describe the current work-in-progress, or commitment point which puts the project into "Doing" on the card. Depending on the project, the reporting mark could be a list of reporting metrics that describe the current work-in-progress, or commitment point which puts the project into "Doing" on the card. There are no requirements for the reporting mark, but given my history with existing implementations, I decided to adopt the current industry standard.

The remaining cards are for tasks and sub-tasks that are to be completed. Both types have the same format. The task or sub-task is written on the card, which immediately evoked the hallmark of the problem. Although I was sorry to lose the visible capability of having project cards all over the walls, the portability of giving specific instructions to team members for each card was well worth it. My up-to-date task and sub-task list is kept in Excel and printed out at the start of each day. I also keep a copy of the task list on my laptop in case of emergencies.

By using Excel, I was able to use and print formulas to create an overall project status report. This is a simple matter of updating the spreadsheet when a task or sub-task is added or the status changes. The spreadsheet also includes the number of hours spent on each task, which is helpful for tracking the project's progress and for estimating future projects.

Each task or sub-task card has a unique number. This number is used to identify the task in the spreadsheet. The number is also used to identify the task in the project's task list. The task list is a simple text file that contains the task number, the task description, and the task's status. The task list is updated daily and is used to track the project's progress.

The task list is also used to identify the task's dependencies. The task list is updated daily and is used to track the project's progress. The task list is also used to identify the task's dependencies. The task list is updated daily and is used to track the project's progress.

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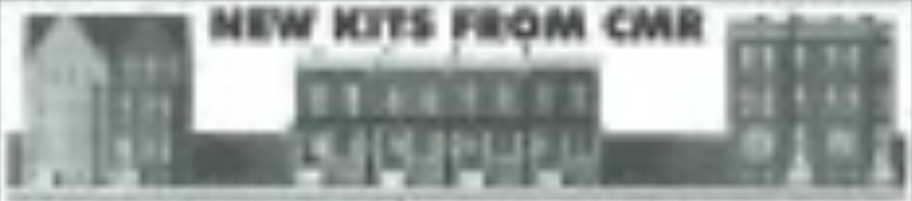

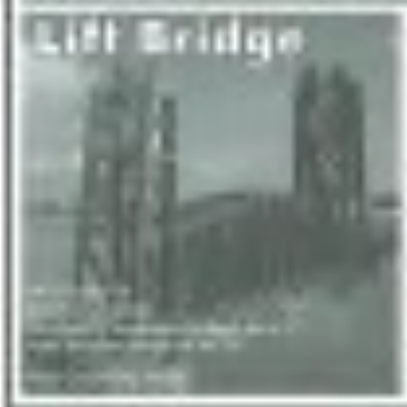

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Mather Patent Boxcar Fleet

C&EM 6000-8454 Series

words and photographs by Allen Nelson

One of the current HO scale steam models to hit the market in recent years is the Colorado Southern/Texas 2800 Mather patent composite boxcar. Paint and lettering are their finely detailed models with recorded and large side sheathed details all detailed that also surround the models. The model has been offered in kit form and is also offered as a new "Limiteds" kit, which has much of the most unfortunately factory assembled.

While the model was to have two flat, a modeller should be comparatively short as it has exterior height of the cover. I have been still also three dimensions on board with the equally well done Colorado Power

Before 6000 Mather patent stock cars, thus allowing the manufacturers serious economies in model design and production. Although late for most of the Mather fleet operated prior to World War II, what the era and to

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Extra! Extra! Read All About It!
New O Scale Publication

Presenting Remote Clinics

Broadcasting your meetings and clinics

words and photographs by Marshall Albaum, Eugene Bendiksen and John Nelson

Background

A challenge for any geographically dispersed Division of the NSRR is providing opportunities for participants who cannot attend study regularly meetings. One of the most common forms of providing this value is maintaining a steady stream of distance technologies to keep their members connected and encouraged through sharing their varied knowledge of various aspects of the hobby. One difficulty in such communication is "steady stream." After a time, the usual suspects drop out and the Division Newsletter begins to suffer. Division meetings are very challenging to organize and time constraints for the participants. A long trip to another Division is an investment in time and travel expenses, not to mention further limiting availability by having to be away for an entire day or more. Also, it is hard for many Division members to find or tap into a source of good, experienced clinicians. The certain aspects have these issues can be addressed by incorporating the convenience of the Internet and some of the multi-use media's discussion models.

To help the Division and Program Chairs for various NSRR events, the Mid-Eastern Region (MER) maintains an on-line Academy of clinics and clinic notes on its webpage at http://www.mer.org/Clinics/Clinics.html. This page is provided to help clinicians in the MER in scheduling their clinics for NSRR events. It contains information about clinics that have been presented in past meetings for the MER and may be suitable for presentation. The user's computer makes it the best way to find a specific topic or individual. Every clinic is listed at least two times: author — last name first, author — first name first, title, and topic. Clinics are identified in the following categories:

- Advancement programs
- Control
- Electronics
- Miscellaneous
- Operations
- Planning & observing
- Planning
- Photography
- Principles
- Rocketry news
- Scenery
- Signals
- Structures
- Tools
- Writing

Below: Use different ways provides to connect to your receiver. Here we have used a personal computer by using an USB input connection, a serial cable. Other connections are also available on the receiver.

To illustrate how this database is intended to work, John Gobert, the Program Chair for the Philadelphia Division, contacted Marshall, informing about presenting his class on "Underground Buildings Using Your Computer for the Interior" at a Philadelphia Division meeting date coinciding the earlier dates under consideration for the Washington, DC, date. After some discussion about dates and logistics, a decision was made on my presenting this class naturally using some alternative technology.

Teleconferencing

Teleconferencing is increasingly common in business today. We decided to apply this familiar technology since our discussion today. We thought that if the experiment was successful, a teleconferencing would represent fortunately many NCRC functions, which also prompted a clip from a similar discussion to share with you.

For this first experience, we decided to use the lowest technology where the client and I were to participate in telephone and Internet. Before our presentation, we discussed the use of the telephone for presentations that involve voice-over. We chose Marshall's class notes as primary driving presentation, rather than PowerPoint. Open Office provides compatible and compatible files and more. It is easy for the author to send a copy of the presentation by email or if the class setup is provisioned as a LAN or other medium. The class will be delivered locally using a computer and projector. Adobe Portable Document Format (PDF) is ideally suited for showing the presentation on a computer rather than the need for the original file.

To give some personal presence, Marshall sent a photograph of himself to the electronic JPG format that was projected during the introduction.

The Audio Part of the Teleconference

In some cases, the sound information delivery is possibly a subject on which Marshall's many colleagues and projects. The presenter's voice will be heard at the two destinations. There are several options here:

- Landline on land line
- Mobile phone to mobile phone
- Mobile phone to land line

All three voice options will potentially work as long as the presenter's voice can be amplified on the receiving side of things. We'll cover that later. In some instances, mobile phone-to-mobile will have some echoing of the voice sometimes. Several variables can be cut off when the phone receivers from listening or speaking.

Getting the client to voice just a matter of coordination. The visual part is locally projected, and the discussion on the phone can refer to slide numbers or just say "next slide" as advised. To avoid confusion, numbering of and referring to slides by numbers is advised.

Assessing the Facility

Once we've discussed the possibilities, to what would lead us to choose a certain technology for our remote client? We need to take stock of the capabilities available in our meeting room.

- Is a wired telephone land line available?
- Internet access?
- Is there a dedicated (shared) phone line (amplified) speaker phone available?
- Is cellular service available, either wired or via a cell phone?
- Is video conferencing available? Usually, this would be a business-class setting.

Remember that even if a regular telephone line is available, it will probably be long distance to your remote client's. You may want to do another cost with the facility's management. Another option is for the client not to call the client location.

Security + Quality Presentation

Although most of these issues are new, don't think that everything just will work the day of the presentation. It could be the wise one to work before on your system, to obtained permissions for use on your the facility (or with friends) on the same end. We found that using a mobile phone for both the presenter and the audience side produced a situation where Marshall's first few syllables were lulled and left with merely a muffle a bright silence. We had Marshall use headset as before and the problem was avoided. Another discovery was unacceptable feedback. Pointing the phone or microphone behind the amplified speaker is advisable. Since the mobile phone also allowed an "open mike" for people to ask questions, to be allowed Marshall's voice to be heard through his phone, which is distressing because of the time delay. We took pains to save presentations of the mobile phone as the client environment also allow.

Armed with the knowledge, we chose to present a PDF (Adobe Acrobat) version of Marshall's slides locally using a computer and projector. The advantage of doing this is two-fold. The PDF file is easily e-mailed to your client's computer and a shared drive or CD, and it will maintain the font, formatting, graphics, and color quality. Also, the PDF file is smaller than the source presentation file, so it takes up less space on your hard drive. It's also easy to open a PDF file on a variety of computers and operating systems. Other ways are to save a version of

Above: Brad Tate (left) and Greg Hendershot in person at a desk at the Philadelphia Chapter.

Stephen prompts from the phone's future we discuss how a passive subwoofer we choose as our stereo receivers with available speakers to do the job. The mobile phone used was an Apple iPhone, which has a standard 3.5mm stereo headphone jack, so we need a cable with the 3.5mm jack on one end and two RCA jacks on the other. There are a plug-and-play "AUX" inputs on the mixer. Other mobile phones may have different headphone jacks, but usually available

Above: Powered speakers are the heart of your system. Make sure you have a good amplifier and speaker combination. We've used two M-Audio BX5a powered monitor speakers. Photo courtesy of M-Audio

cause the bandwidth to something else. Another issue with using a mobile phone is that you can't hear the sound from the phone's speaker, so you can't get any feedback.

Our Solution

The morning of the presentation, all the equipment was set up and tested. Since we were using a mixer, some inputs had been already set up for us, so the volume of the music, video and voice could be balanced. Since the mobile phone had a video, we could hear the voice and image synchronization. The final amplified loudness was "rounded" which allowed for the presenter to stay in the back of the room. During the testing, we were pleasantly surprised to find that the microphone of the iPhone picked up our voices as well that during the actual presentation the audience was able to ask questions without only a slight decrease in the volume of their voices.

Following tips from this conference presented very positive feedback on the use of this technology. They appreciated the variety, the interactive nature of the presentation, and the opportunity for using newer technology. Handouts were very clear and well liked, and the opportunity for us to interact with the Division members could really add geometry.

Higher Tech

A photo shoot involves a lot more video for these students if possible, but not necessarily recommended. Many of us who have used commercial grade video conferencing typically experience a lack of fine detail of facial expression and body language. This is a subjective experience, but many people believe that face-to-face interactions are still preferred photo shoots locally. This is especially true for showing fine detail such as needed by a ceramics building or clothing. On the other hand, a prepared DVD movie may be appropriate — especially one made in HD — if the subject is specialized or another subject that is best shown in motion. Video clips — Apple .MOV files or Windows .WMV files can easily be played by themselves or embedded into PowerPoint presentations. Plans should be used to augment, not replace, the in-person discussion or meeting. It is the interactive nature of the presentation that makes it so successful.

OK, so what about the technology geeks — a prepared DVD movie probably would take many conferences and technical

NMRA Future National Conventions

Please recommend dates and cities for future locations for National Conventions. Let's make all the National Division Meetings and Model Railroad Conventions

Annual Pacific Northwest Area RR Convention & Train Show	July 31 – August 3, 2008
Milwaukee Mainline	July 31 – July 27, 2008
Chesapeake Flyers	July 31 – August 3, 2008
Southwest Limited	September 26 – 28, 2008

learning skill. We suggest working up to an annual exchange. The reader might try to watch the instructions. Scanning a show at a regional or national convention might be the way to go. If the technology evolved for a conventional in-person presentation, it probably can be made to work remotely. One advantage of digital photography to capture close-up detail should be considered. The clinician can take macro photos of interesting details on photos for us during the lecture, or possibly a series of photos of a common item perhaps should be viewed when can be shown to give presentations a varying zoom. Furthermore, the pictures can be presented in close succession for a close view and the ability to easily do common tasks of

More advanced options are available, depending on the technology available and complexity desired. Many people in the modeling world have used movie such as Webex or GoToMeeting to present a presentation (and apparently record) to a remote audience. Be aware, however, that these services are not free. If the meeting is held at a business facility, the possibility for using video conferencing is an option, as long as the location has compatible hardware which has internet. Note that this video-based option is needed for some, doing that requires a lot shorter. Skype might be considered and evaluated as a free alternative to determine if enough bandwidth is available.

If you decide to use any internet like WebEx or a similar computer-to-computer service, a microphone headset is available at the Gallery. Make sure to ask if it is compatible and if there's a fee. If you are planning to use a webcam, there may also be extra fees and/or a personal equipment issue is also, consider that whether over the camera the headset is necessary for both, sound session video.

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Kitbashing an HOn30 Climax

Using an N Scale BO-2 into Existence

words and photographs by Peter Ustick

Introduction

I am a member of the Great Lakes HOn30 Railroads Group, a loosely organized group of people scattered throughout the Michigan/Ohio area, with interests in modeling HOn30 narrow gauge railroads. The group chooses model railroads in HOn30 which is HO scale, using N gauge track, spacing. This roughly corresponds to 36-inch gauge, and is called HOn30 or HOn30. Even though we predominantly model narrow gauge railroads, we sometimes do standard gauge railroads. Some of my favorite standard gauge railroads are the Milwaukee Road and Railroad. Model railroads are a hobby, a 1:48 or 1:24 scale is large enough to provide the detail of 1:48. Model railroad gauges (sizes) provide opportunities for various scales, locomotive drive mechanisms, and wheels, and there are many commercially available HOn30 1:48 gauge railroad locomotives and rolling stock with a reasonable investment.

The organization I joined is a member of the Great Lakes Garden Railroads and tries to build locomotives using N scale locomotive mechanisms and concentrates designed to adapt the mechanisms to HO scale narrow gauge prototype locomotives. Having found that Micro-Trains narrow gauge locomotives also run reasonably well, and look reasonable models, I have attempted to build other locomotives using, nothing or quite cost-prohibitive. One example is the 3-axle diesel-electric I built, described in the March 1998 issue of Railroad Model Craftsman. In the present article, I describe the HOn30 narrow gauge C-Series locomotive I made using a Micro-Trains drive/motor mechanism and components from an HO Accucraft BO Climax locomotive kit. My motivation was to create a reasonably detailed narrow gauge logging locomotive that could be used on a narrow gauge layout like of a standard gauge HO layout.

Basis for the Climax HOn30

An article in Model Railroader (December 1982, p. 134, "A Trestle of Realism for MDC's Climax" by Gregory Komoto) inspired the locomotive for this. The article described how to make the MDC versatile Climax. Unfortunately, never realized, it was noted in my that the MDC Roundhouse Climax kit body shell could be fine-tuned to fit very well on N-scale diesel locomotive drive mechanisms, and could be modified to provide a reasonable

representation of a narrow gauge Climax locomotive. I acquired a Life-Like N-scale locomotive that had excellent running characteristics and could run at very slow speeds (typical of a geared locomotive). Having a drive mechanism and body shell to start with, I set about to design a method for combining the two.

First, a platform was fabricated to fit over the Kato mechanism. I chose to make the platform out of 0.040 inch thick sheet styrene, and measured it with 0.060 inch styrene strips. A little wire (or narrow, platform surface) was made the thickness of the N gear chassis inch that is used by a typical Japanese model railroad. The platform would sit on top of the gear chassis and rest on the top of the gear chassis. The styrene strip bracket around the platform that served as a foundation for fitting various pieces of the body shell, as will be described later.

Body Modifications

The stock HO MDC Climax locomotive body is relatively accurate in shape for such a diminutive locomotive. It does not have a chassis, which has a motor mounted on one end and a flywheel mechanism on the other end.

Above: The main model ready to assemble.

Once experiments around the location of the boiler and rear bolt holder to an even high degree were complete, it was time to start assembling the model. This is what the author of the above model illustrated article attempted to convey in his article, and he was at least partially successful in conveying the finer points. By selecting an N scale mechanism which has a much lower profile and converting to current gauge it is possible to have both the boiler centred and the fixed bracket.

The main 1/8" Ultrex body shell is shown above. The body shell was cut into two pieces at least three bolt holes and the window and chassis were cut to suit the appropriate N gauge dimensions. The boiler section was trimmed on the above section to by removing the side brackets. The inner portion of the cab roof was painted and removed, comprising the cab to be installed into the shell. This was just enough material to provide a secure fixing to the body.

Brass tubes were added to the front of the platform, such that the trimmed boiler section sits on top of the right height over the side panels are fixed. One brass tube was removed from the rear and re-fixed to the top of the side panel and fixed up with the cab interior sills. After this has been set down on the body side was removed to be trimmed to the shape of the body itself. The body side pieces, which to fit the cab side panels were glued to the platform frame. A new cab front panel was fabricated from styrene strip and sheet material. The side of the cab was trimmed with strip styrene. The roof cab roof panel was trimmed to fit and to provide a slight overhang and also to cover the cab interior. The roof was then glued to the underside of the roof panel and fixed to the top of the cab and could be removed when needed.

The new bolt holders provided a much more secure hold and could not be removed when

Above: The main body shell trimmed to suit the N gauge chassis. A brass tube is fitted to the front of the cab.

the boiler was in place. The cab interior was fitted with a new floor and the cab roof was fitted with a new roof. The cab roof was then glued to the cab and could be removed when needed.

The new bolt holders provided a much more secure hold and could not be removed when the boiler was in place. The cab interior was fitted with a new floor and the cab roof was fitted with a new roof. The cab roof was then glued to the cab and could be removed when needed.

Finishing

The completed locomotive was primed with Halfords Bright Grey Primer. The roof panel was painted Matt Red. Bright red was used to paint along the sides from the front up to the cab. The lining was applied using decals, and the complete body was given a coat of Humbrol Matt Varnish. A light weathering was applied using a dry brushing technique using light grey and black powder paints. Additional details such as the brake gear, hand brake, and handrails were added. The chassis was painted in the N scale gauge complete height. Window glazing was applied using clear styrene sheet material and held in place with Humbrol Clear Crystal Klear.

Finally, a cover was made from styrene to fit over the top of the chassis with the side and some other black. Engineers and drivers figures from the same set were assembled and painted. The cover is removable, to gain access to the mechanism, and has a small catch fastened to the top of the cover so that it can be removed with a pair of tweezers. As mentioned above, the cab roof is glued to the cab, to be removable, and then the chassis can be removed to reveal the mechanism from inside the cab.

Final Thoughts

The locomotive ended up looking very much as I had envisaged it. The N gauge chassis is quite reliable and runs very well. The model is quite heavy and has a good weight to it. The model is quite heavy and has a good weight to it.

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"Ideas for Kit-bashing [Kit-bash Motive Power]" Phil Gladu, *Atlas gives a*

Above: The real and miniature were developed and built in tandem. This photo was taken in the late 70s in the shop at my home in Ohio. Photo by author.

NMRA National Convention, NMRA(?), Milwaukee [8] (in NMRA 8000+ box: NMRA 8000+ Atlas CC).

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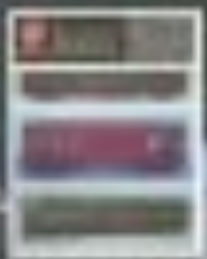

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Car Horses

Holding Up Rolling Stock For Repairs

text and photographs by Terrence Dunn

Car horses (or A-ends) are economical, universal pieces of equipment used to bridge car repair work. Whenever a freight car has to receive one or more new trucks or wheelsets (more about on the subject as opposed, it is necessary to raise the car off the trucks. The trucks can then be rolled out from under the car so that the necessary work can be performed. If the original truck is to be reused or if it's sidelined a particular time before repairs can be completed, another freight car is necessary to keep the car raised up off the ground. After jacking up the car and removing the trucks, the car horses can be placed under the car supporting it safely and securely so the trucks can be rolled back in position.

There are, of course, a large variety of car horses that can be used. Every new Santa Fe hire had his own idea of what the ideal car horse should look like, but regardless of their various opinions, car horses have only strength, stability, and practicality to go by, once a standard was created and adopted as such by Union Pacific's Rio Grande Motive Power shops. These shops are located in Denver, Colorado, and are responsible for the repair and maintenance of the UP's fleet of locomotives that are used in various shops throughout the country. Some large shops even have hydraulic cars that roll under the ground and are really a combination of a pit and a car horse. There are similar models to fit a considerable repair shops.

The narrow car horses, and an opportunity extremely popular design, are made using aluminum. They are lighter and easier to move around. A 4-ft piece weighs only 60 lbs. The overall design has been in service for many years and is probably closely resembles, but was broader and heavier than its successors.

The aluminum car horses are fabricated by bending aluminum plate into a semi-shape. Top and bottom caps are then welded on, creating a box and reinforcing plates for the ends. Two handles on each added on opposite sides of the cross so the car horse can be easily moved around. Aluminum is used in shop to make a distinctive, lightweight, durable design that the hammer for stubborn locomotives. A piece of wood is placed on the bottom to spread the load so it doesn't sink into soft ground.

Above: A close view of one of the car horses shows how it is made for bending the metal into a cradle. The wedge is for keeping the metal pin in place, while it is in position under the car. Below: Car horses are used all over the country. Here a UP car is raised from the frame on which the wheels and trucks are mounted. A brake shoe is visible between the wheels.

Climb Aboard the Canton / Northville Flyer at Grand Rails 2012

article by Jim Davis, MMR

What happens when you combine eight great layouts, a prize pack, and dozen with the layout owners in a railroad-themed restaurant? A few already-interesting years and a memory or two. That's what it's all about for you when you climb aboard the Canton/Northville Flyer for a tour of the many layouts that you will see during Grand Rails 2012, the NMRA National Convention, July 29—August 4 in Grand Rapids, Michigan.

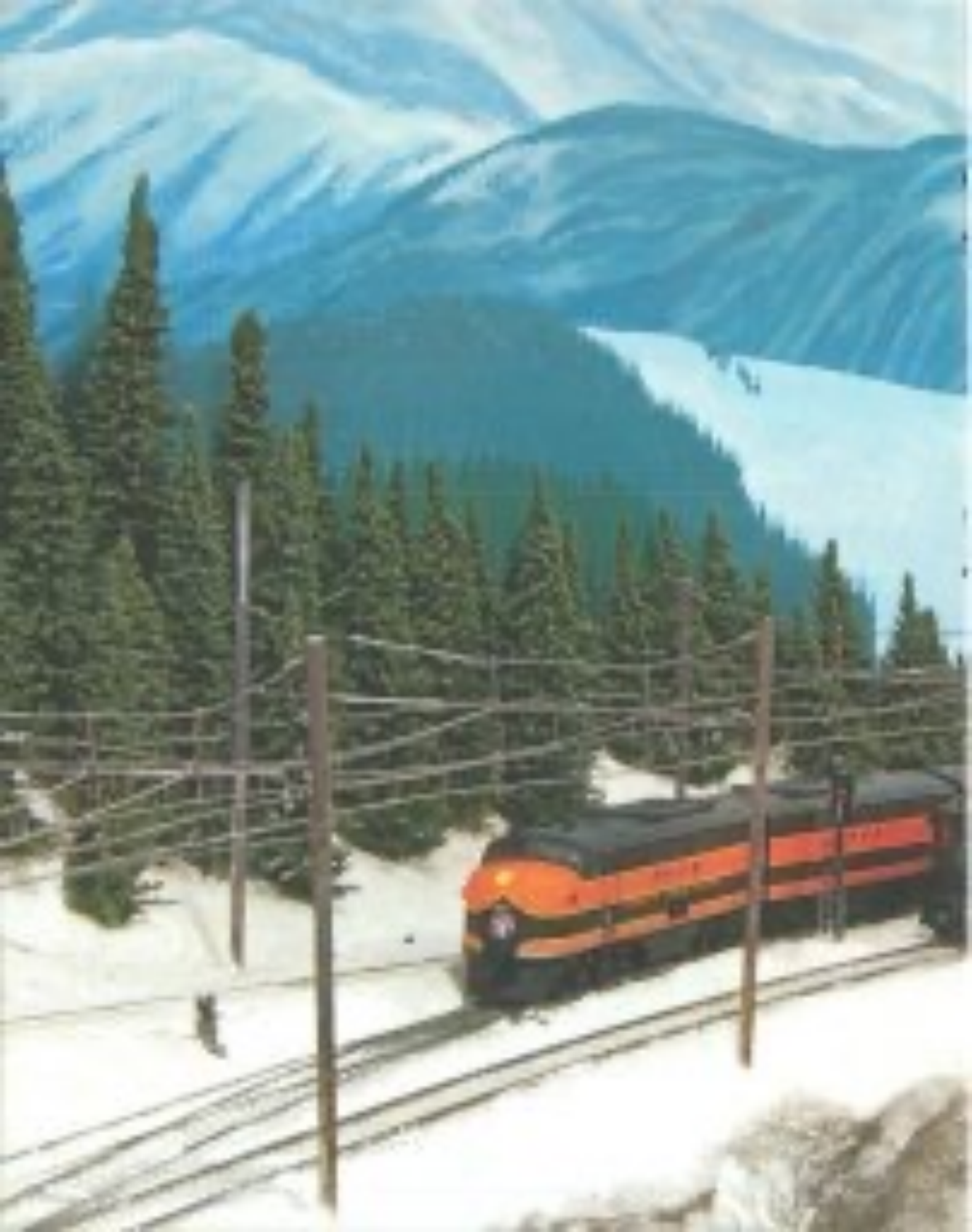
The all-day tour takes you to the very suburbs of Detroit. The layouts and their owners have made it convenient. All layouts feature DCC control, most with sound.

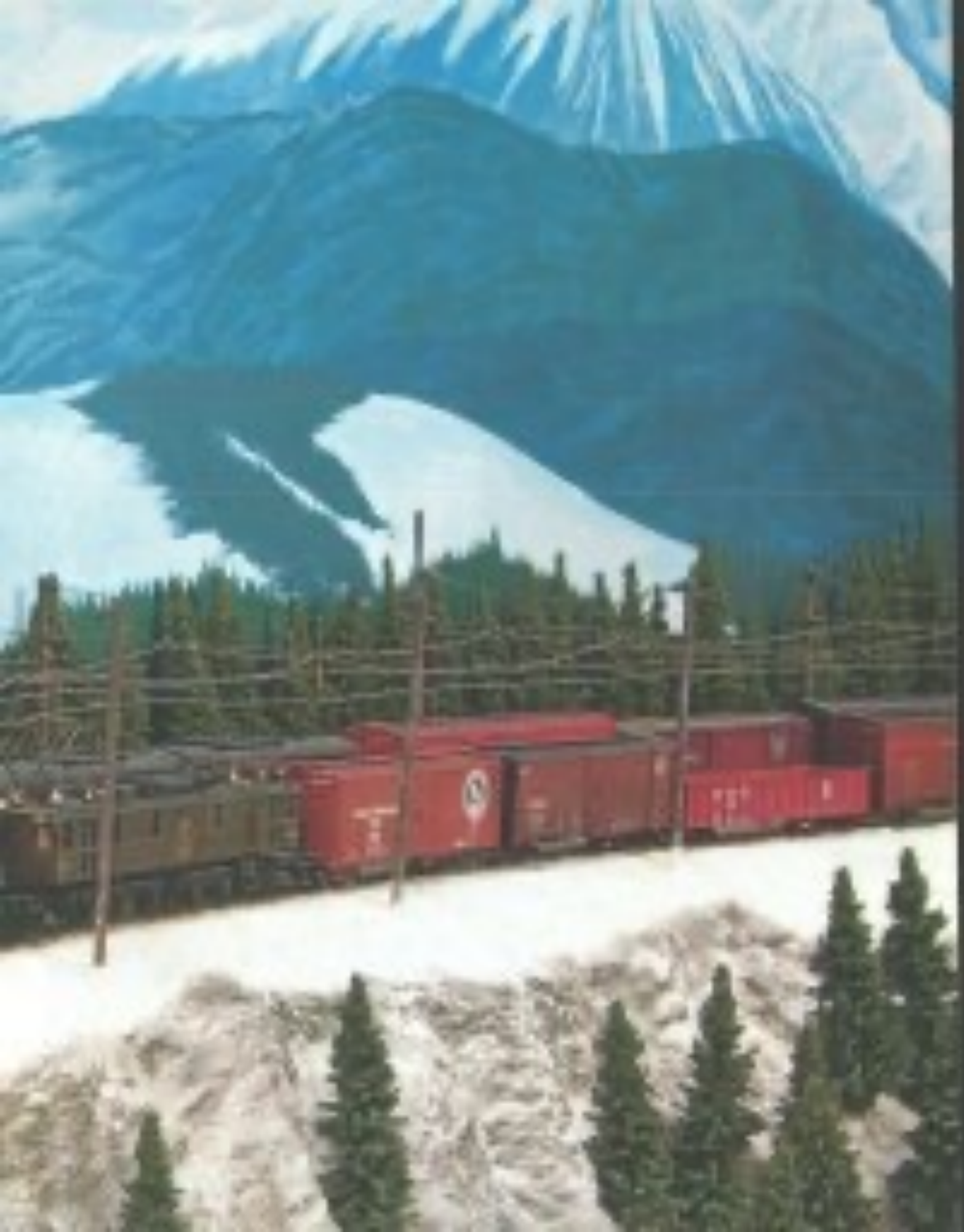
All the cars have been featured in the major hobby magazines and their layouts are Classic Joppich, make no national debut here. Two owners are MMRs, while three others should be by the time you read them. All four of the owners are members of the Midnight Peanuts Confraternity, a model railroad group that's been meeting once a week for some 30 years. As the tour was created — namely, their owners — he's occasionally allowed to operate on the members' layouts, basically when he promises not to engage in any kind of switching when he thinks no one is looking.

Your day begins with a tour in front of the Lansing. You'll board the upstairs lounge car and a Union Pacific diner/lounge car where the layout owners will join you for the remaining layouts. Then it will be lunch at 1886, a railroad theme restaurant where the layout owners will join you for dinner. You will get a private room where you can ask them questions or drive the guy nuts a subject you didn't have time to ask during the tour. (That is, when you're not busy watching model railroading for eight hours on this awesome-to-the-CVS model line!)

For a quick preview of the layouts take a look at the photos that follow. For more details about the cars and everything else you need to know about Grand Rails 2012, see the website at www.gr2012.org. We're looking forward to your visit!

Above: The first train of the day pulls out of the Canton/Northville Railroad's Grand Rapids yard. At the front is the Union Pacific diner/lounge car, followed by the Lansing lounge car. The railroad is a traditional-type railroad that is currently operational and has been in the hobby for many years. — Jim Davis photo





N Visible

Ol' Betsy

Ol' Betsy in N Scale

[illegible]

After a new level each year, it was time to paint the cab. Modern, cunningly hardly used. I was a little nervous about this painting even though it looked quite simple, was well worn. I wanted a realistic paint job and I was also excited to [illegible] of 50 coats later and there it was very small. I could get away with painting the cab without bringing it inside. First, I brushed on the white grill going a little outside the grill area, so it's covered with the blue color to avoid showing white. Used "Bonnet" Model Master's blue color for the grill. Then, I brush painted the remaining cab hood, fenders, and running boards and also flatted it's raised spotlight with Testors blue enamel.

After that was dried I glued the driver (Jerry Hall) in the front seat and glued the cab onto the chassis with ACC. At this point I painted the remaining rear chassis with an Apple Barrel flat black. It always seems that I miscount and am on the tire one or two coats of another color. So in this case I went back and touched up the tires and the white grill. Once the white area I used an acrylic flat black paint covering over the decal on the grill. The windshield white considerably, causing it to bleed in with the [illegible] frame.

The flatbed was now glued to the chassis and the remaining two fenders and bracing to [illegible] of the rear tires were cut [illegible] painted to [illegible] and painted [illegible]. Various colors paint was used for headlights and taillights reflectors. Red lenses for taillights and markers on Ruby Red [illegible] silver paint used to [illegible] and natural glass wooden [illegible]. Future floor polish was used for its headlight lenses.

To complete the model, a few scrap pieces of sculptured and a tire and rim were added to the flatbed. I don't own or sell Barry's flatbed being empty — there was always some [illegible] to the tire prior I thought I was done and I swept the [illegible] Only thought I realize there was no glass in the windshield or rear window. Once I had the Future floor polish on the windshield I used it for both.

I thoroughly "[illegible]" the research, construction, and [illegible] of this [illegible]. "Uncle" Barry now is in front of [illegible] the Blackwells bringing back [illegible] memories of a great little coach.

Epic Finale "Drunk Paul" Mode

"You never Know... Our Father's Day [illegible]. Wrapped [illegible] present time. He was a [illegible] of the [illegible] a model [illegible] to find a [illegible] [illegible] thinking. He never understood my fascination or passion with "playing with my trains" but his support of my hobby was invaluable. He was one of the rare few who knew the importance of kind words, declaration, and kindness. I am sure he would love to see his daughter marry a [illegible] [illegible] or

[illegible]

[illegible]

[illegible] — straights could remind. But over the years, we grew together.

One Sunday in the early 1970s, I told breathless friend Frank Brink (Grand Island, Nebraska) I could have it if could find a way to get it back from Arizona, Iowa. Always ready for an adventure, Marvin offered to drive his 1969 Dodge pickup to get it. So the next Saturday (after we went the 10 miles to Altoona, Ia. hired western boots when we arrived back to pick this weird metal out the driveway for the house. We headed up and overnighted at Jerry Jones. I only did we know that our friend's neighbors had seen Marvin "leave" and started to call the police. I will do so I'd not get home just in time to explain the situation. Between Marvin knew enough that story alone from his cave was in the final almost gained him arrested for stealing railroad property!

After unloading a North Island bank, topic's sale in about 1981, I was becoming that I could have brought a sprinkler on existing orders for MR but had no way to get it home. Marvin chuckled at my anxiety like I had made a big mistake and said, "Next time call me and we'll haul it into the big green truck."

"Next time" came a few years later, when Arizona said I bought a railroad sign way highway, coming signal in a Chicago it. North Western station. Bruce Jones. We called Marvin, who immediately drove his semi (1969 Dodge pickup should make sooner as. The trip was no huge problem (literally tried to halt around it and lifted it into the bed of Marvin's pickup, which sagged under the weight. He ate were home, loosening slumgullion many than two hours with one new strainer.

In the 1990s, my in-laws' health began to deteriorate. They could no longer drive long distances to visit relatives. In 1993, we drove down in their car to Philadelphia to visit family while I attended the Valley Forge NMRA National Convention. It was an interesting trip. We talked listening, the weather, and machinery — those of Marvin favorite topics, Subsequently, I would have a chance to chip in something about the NMRA convention and visits.

In I would pass another whole on the [illegible] Marvin would check the right headphones to make sure I was not running [illegible] Kansas. I realized I was the [illegible] when others were driving. I had been so busy trying to keep from having my dad that I turned into my father-in-law!

The 1999 trip must have been good for us the in 1999 we did the same thing to visit Marvin's brother and family while I attended the Atlanta NMRA National Convention. And you know, I was really getting into these agricultural discussions with Marvin. Maybe I should model more agriculture on my new layout!

By 1996, I was [illegible] Arizona, so we made a quick visit to the Grand Canyon on our return. After hunting down my place to model agriculture on my new railroad, Marvin got up from the supper table (because in the room was from the kitchen) and disappeared for about a half hour. Later he came back carrying a [illegible] and handed it to me. What else?

Marvin's response was a statement: "If you are going to model Iowa crops, you need good Iowa dirt to put them in. Here a genuine Iowa gopher dirt, taken off the front yard of the house where Dorothy lived!" Instantly, I realized a dimension to our friendship had blended — the kid who played with trains and the man we became. It was a good feeling.

For the years after, I would rely on Marvin's expertise in helping me model agriculture (combines, harvesters and buildings). Today, the train is stored and only runs around periodically as our Colorado home, and there are many things we enjoy about the hobby that we did not anticipate when Marvin introduced me to it and we [illegible] Marvin's memory will always evoke "genuine Iowa gopher dirt."

I never got a chance to thank Marvin for the opportunity to tell him how much I appreciated his support of my hobby in any. Please do not pass up the opportunity to tell someone how much you appreciate his or her help. My hobby and I will miss you, Marvin.

Merchant Tanners Line Warehouse Ellenville, New York

notes, photographs, and drawings by Harold W. Kennell, NSAR

The Merchant Tanners Line Warehouse, once located in Ellenville, New York, was built in the mid-1850s. Originally it served as a shipping point for bluestone on the Delaware and Hudson Canal. After the canal was filled in, it served a spur of the New York, Ontario & Western Railroad's Kingston Branch.

When one stands on the towpath, it is evident that several changes have been made over time. Old photos with the canal show a dock on the south and western sides of the building. The land rises behind the structure and the opposite sides, being the elevated ones.

It appears that a ramp was added to one side during the canal days. Apparently the

Above: As you may be able to tell, I used a razor saw to cut openings in the sides of this shed. The doors at right are cut from .040" styrene.

When the sand overflowed to the deck for the warehouse was removed. I'd left a spot up on the building at the last minute. The railroad intended to use the warehouse on the long side of the building. To accommodate the height of its boxcars, NYS&W installers installed a corner door on each end. The upper door could be used for loading bags from gondolas and the like.

In 1996, an application was made to get this building National Register status. But failed and the building was leased down.

To keep costs down Silhouette, the manufacturer driving to count days, and the

can easily be sandpapered smooth with a medium sandpaper and brushed with a primer. Then paint with a good exterior paint. Be sure to paint the ends of the boards, as they are the most vulnerable to moisture.

Use caulk to fill any cracks between the boards and around windows and doors. Caulk comes in a variety of colors, so you can choose one that matches the paint you're using.

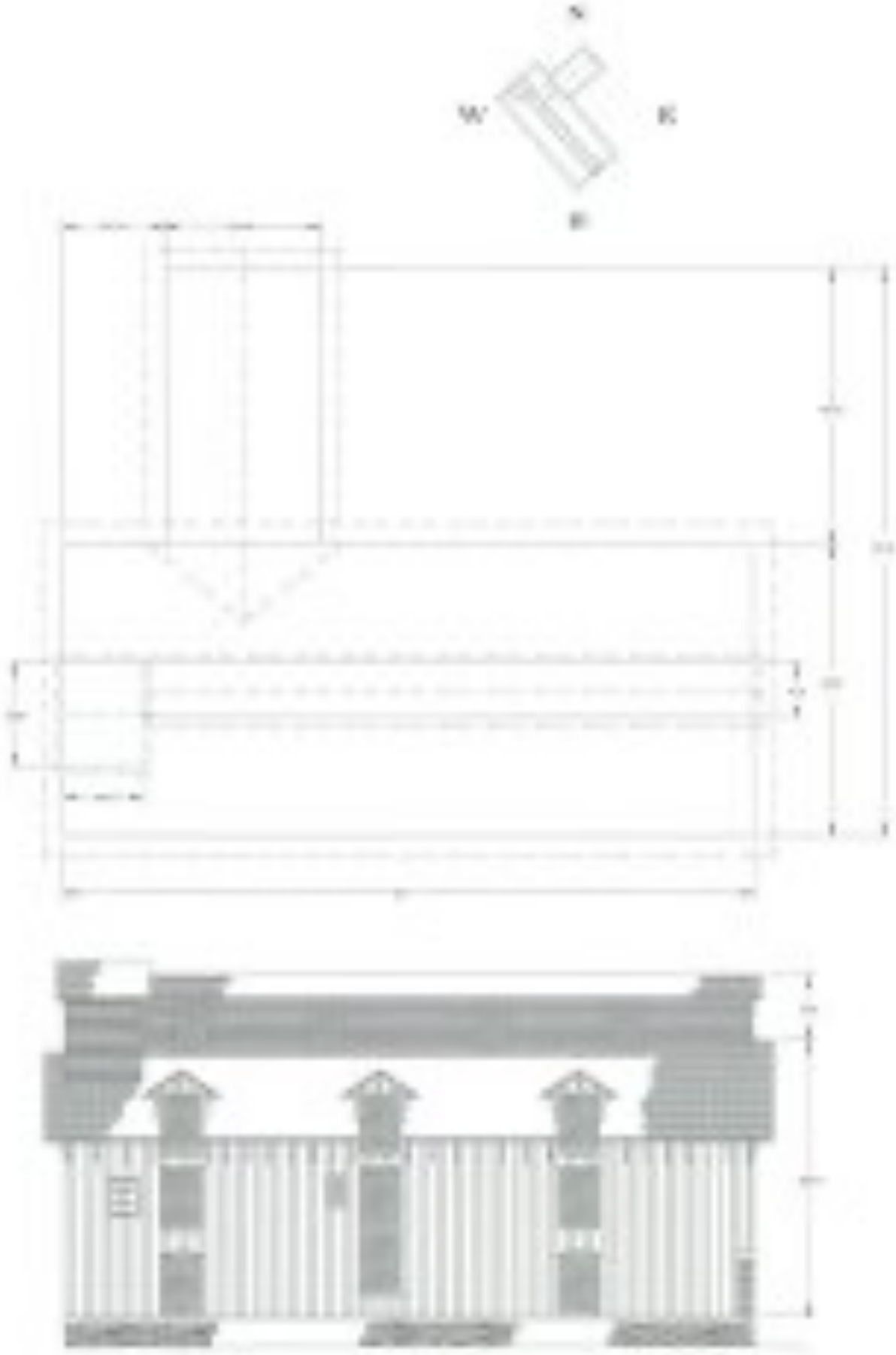
Replace any broken glass in windows. Use glazing compound to hold the glass in place. Then paint the compound to match the trim.

Check the roof for any damaged shingles. Replace them with new shingles. Be sure to nail the new shingles down securely.

Clean out the gutters and downspouts. Make sure they are free of debris so that water can flow freely.

Trim any trees or bushes that are growing too close to the building. This will help prevent moisture from getting trapped against the siding.

Finally, consider adding some landscaping around the building to help improve the appearance and prevent erosion.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Display Car

Product Announcements

by Todd Glitsos

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Research & Test Car

Conducted by: Mabrid A. Van Ahlift
Manager, Standards & Conformance Department

The function of the Conformance and Inspection Group of the NMRA Organization is to test equipment submitted by the makers that is advertised NMRA standards and recommended practices. The NMRA endorsement of the product can be assigned only if it meets the standards and has successfully passed all appropriate tests. Only then can the manufacturer use the NMRA Conformance Logo and award certificate.

Intermountain SD40-2(R) in Scale

by Gary Hansen

This product received a Conformance Warrant

For locomotives throughout history have obtained an iconic status. In the generation decade, you could argue EMD's F7 or Alco's RS would be good candidates. Second generation diesels would most likely include the GP7 or SD40. But almost certainly, the locomotive diesels would hold EMD's SD40-2 as the icon of diesels manufactured in the 1970s and 1980s. The first SD40-2 rolled off EMD's assembly line in January 1972. Production was continued until October 1980. The long-run made the SD40-2 the best selling model ever produced by General Motors. Total production was 3,955 units, exclusive to the U.S. Virtually. Models in Brazil, Canada, Great Britain, Argentina, Korea, Iran, Morocco, Peru, Pakistan, Zimbabwe, and Algeria.

The SD40-2 proved its economy was powered by a 16-cylinder turbo-charged 3,600 hp (4,645 ft) prime mover that produced 3,600hp. As might be expected in many advertisements, several versions of the SD40-2 were developed. The SD40T-2 (T for tunnel motor) had a modified cooling system to be more effective when operating through tunnels. Notably in Wyoming and Southern Pacific. High nose versions. A few rubber cushioned units for Burlington Northern and identified as SD40-2R. Even, some narrow gauge versions were constructed and named SD40-2. Finally, Canadian National bought 123 SD40-2W units, numbered 5240 - 5363. These locomotives featured the wide Canadian cab with a full width cab with four windows. The Diesel Division of General Motors of Canada Ltd. located in London, Ontario built the units. A great advantage during the manufacturing SD40-2s and the variants can be found at http://en.wikipedia.org/wiki/EMD_SD40-2.

If you would one of the many EZ-set 4 railroads, chances are they had SD40-2s. And, if you needed Canadian National in N scale, you're really in luck because Intermountain has introduced an impressive SD40-2W with and without dynamic brakes and in four CN paint schemes. In addition to the standard CN paint consisting of the red cab, large white CN logo and black frame, the diesel fleet CN Newly painted versions were being produced. The bad script of New Brunswick road of

the long hood end was used from 1990 to 1991. Another variant being offered is the ex-Conrail unit 6927 with one installed on the side opposite to the pantograph and no offered in such volume.

Simply put, Intermountain's N scale HP40 - 2W has excellent detailing. Examples include separately applied grab irons, bell, horn, hand rail line, windshield wipers, screendoor, pushed-in fan grills and body scroll. A sound cab driver is included for the crewmen to apply. The underframe details are also excellent. All the windows and glazed with clear, non-distorting plastic. Directional LED marker and headlights on the front of the cab. The body rides on the whole also featuring has a slight chassis. While the handrails are durable, the small grabs that secure into the body are quite fragile. Care must be taken when installing after locomotive and especially when mounting the shell from the frame. Operating magnetic couplers are also factory installed.

Lighting for the GE 40 - 2W consists of two small LEDs mounted at each end of the locomotive's frame. The lighting is directional and has a good intensity at normal track speeds. Since the shell is both dark, modelers who will be operating the locomotive in subdued light may want to paint

Table 1. Performance and inspection summary

[illegible]	
[illegible]	Pass
[illegible]	Pass
[illegible]	Pass
[illegible]	Pass
[illegible]	
[illegible]	[illegible]
[illegible]	[illegible]

the cracks either backscattered the headlight source labels or reduce the amount of light that shines through.

All 3 wheels pick up electrical power. An upper set pairs each side of the locomotive across the gears from the trucks' wheels. The lower contacts at two diametrically isolated axles. Orange of the frame is a circuit board that controls the common lighting. Rotor strikes a small DCC, this board is mounted under DCC decoder is installed in place. Like Hobby Supplies a very good article written by Chad Green on installing DCC in this locomotive. Chad also provides some guidance for installing both MOTOROLA® and Digitrax® DH163D1 decoders. The article can be found at http://www.hobbydirect.com/articles/how_to_install_dcc_into_intermountain_loco.htm.

On the test track, the locomotive performed flawlessly. The low speed performance was excellent. Twitchless dynamic provided smooth acceleration and deceleration. On straight and level track, the locomotive pulled 6 cars easily. When running at normal track speed, the motor and gear train was relatively quiet.

The locomotive was examined for conformance to all the applicable NMRA Standards and Recommended Practices. All the details for the Standards passed and also allowed NMRA Conformance Warrant 2013-0009 to be issued. The MSRP for the InterMountain 41340-DF is $219.95. Additional information can be found at InterMountain's website, www.intermountainrailway.com.

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Controlling Geared Motors

How to use a slow-moving motor for stop and go instructions

A low voltage geared DC motor can be used in many ways in the layout. Opening and closing doors, sign and effects and animation, construction of mechanical equipment like hoists or switching tracks, continuously turning and even reversible operation.

Suitable 12 volt motors with attached gear heads or geared reduction transmission can be found in hobby shops or for "second" hand discarded VCRs, cassette tape decks and so forth. This series of articles will deal with several ways to control these motors for stop-go movements, adding animation to your layout.

The simplest control, the one you are reading about, involves a two-limit switch placed on a track and connected to a reversing unit. The simplest switch used to give a full or half rotation. The unit includes the switches, a track and limit switch system, wiring like a diagram which would be made to your specifications.

The simple connections diagram above shows the basic wiring setup. The limit switch is normally shorted to the wire being routed around by the ground source. The shows the voltage to go to the motor positive terminal. When the train contacts the limit switch, the power circuit is broken and the motor stops. It can be restarted again by pushing the switch. Holding the switch down starts the motor continuously. The actual stopped position may vary a little because of inertia, as I have shown. The table limit switches give an adjustable position. There is a capacitor of 0.1 mfd/v and across the motor plus and minus terminals to stop electrical interference from the commutators.

For a full 360 degree rotation, have one limit switch (I use N/C) directly to the MC terminal. A third or even fourth switch could be added between B and the A/NC terminal to create even more stop/go movement.

The motor speed can be reduced by placing a resistor in series with the motor (100–500 Ohms). If the motor is struggle or running over the motor has been shorted, place a large value capacitor and a reverse connected diode across motor to run the motor at a slower speed. The value of these can be found for the capacitor and 1N4004 for the diode. Use of pictures, a heavy for the motor, a string of the motor. Have fun and get your railroad connected!

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HERO EARNED

ROBERT G. (BOB) MCDONALD

My success in raising larger gifts to kindergarten, when my mother and I traveled to Sierra Leone to visit Canadian children, [illegible] the stereotyped teaching the country wanted to [illegible]. The success [illegible] elementary school my family [illegible] the Lamb Mission in Waynesboro, Mama, between [illegible] would have to, she [illegible] home [illegible] around about 500 yards from [illegible] Old Colony Beach. I was able to [illegible] bright and passenger trains all day long. Since my husband [illegible] commute [illegible] the train, I quickly learned [illegible] schedule so I was always home when Dad arrived [illegible] home [illegible]. Also, she [illegible] sacrifice [illegible]

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Featured Book

Trains Transformed: The Classic Era Line of William C. Van Horne

By Valerie Kuntz Inc. Bibliophilly Indiana/Antiquarian Press, 805 N. Monroe Street, Bloomington, IN 47404. To order, please write Inquiry@indiana.edu, or call 1-800-842-6796, or check with your local bookseller. 368 pages, 194 pages, 10 Black and White Illustrations. $29.95 plus shipping.

William C. Van Horne, a true titan of North American business, started his railroad career at the age of 12 working as a messenger for Michigan Central, and continued to be fascinating the presidents of Canadian Pacific. He is credited with opening Canada's interior by means of railway, greatly expanding Canadian interests by founding the vast transport division of the Canadian Pacific — with regular luxury liner service between Vancouver and Hong Kong — and completing Canada's first transcontinental railway. Van Horne was knighted by Queen Victoria for his contributions to Canadian history and, more recently, was named Entrepreneur of the Century by the Canadian Business Hall of Fame. A man of many talents, Van Horne was also a Canadian painter, art collector and owned an Indianapolis race horse named Volante. Volante is mentioned in a gripping account of the largest share-life fight.

Book

The Denver Region Transit Company First Century

By Colin E. Hanlon and Tom Schmandt. Published by Railfan DC Books, Box 6106, St. Laurent Station, Montreal, QC, H4L 4V9 Canada. To order, please write www.railfan.ca, or write to the address above. Soft cover, 272 pages, numerous illustrations, $34.95 plus shipping.

This book tells how the city of Calgary's transportation has developed over the years, a century ago, how it expanded to accommodating automobiles, brought people closer together, and how to its explosive growth the contemporary city is today. What the municipal transportation needs is difficult for everyone and some to share the same streets. Calgary began replacing the streetcars with powerful, quiet trolley buses permanently electronic. Next, the authors will discuss the network of railroads. There "light rail vehicles" where are "streetcar systems" are shared with autos, motorcycles, many more people buses, taxis, and more comfortable than rubber-tired vehicles. Later, Calgary's system is expanding, since the LRVs have proven to be reliable, efficient and popular people movers.

LITTLE TRAINS TO FARAWAY PLACES

By Karl Zimmermann. Published by Indiana University Press, 601 N. Morton Street, Bloomington, IN 47404. To order, please visit https://iupress.indiana.edu or call 1-800-842-6796, or check with your local bookseller. 14x9, first printing, 224 pages, 111 color illustrations, $19.95 plus shipping.

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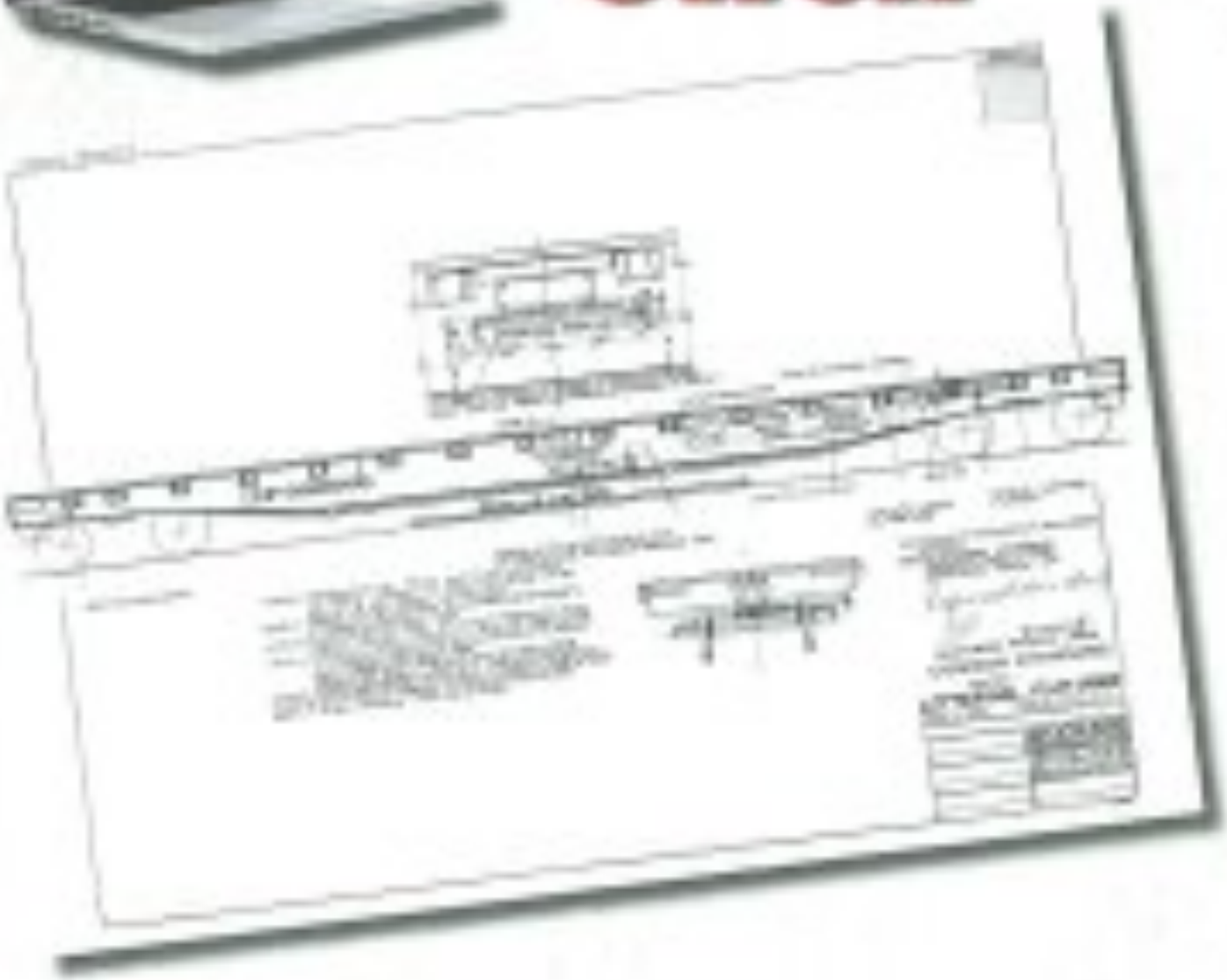

Class F-70-2 and Class F-70-5 flat cars shared a common lettering scheme as shown on this diagram adopted in 1947 and reissued in 1951. These two classes were constructed during World War II and originally carried numbers in 79300-79825 and 79975-80224, respectively. A 1950s-era renumbering effort resulted in a change from these respective numbers to 560000-560524 and 560525-560825. Although not a class was built by the AF and the other by Pacific Car & Foundry, both private lots engaged switcher duty on the roads for which they were constructed in service into the 1980s, meaning that modernized diesel era stencil for appropriate for a wide array of layout operating-era signature treatments. This scene of rusty paint and lettering diagrams is available through the NMRA's Online Archive — NMRA Collection

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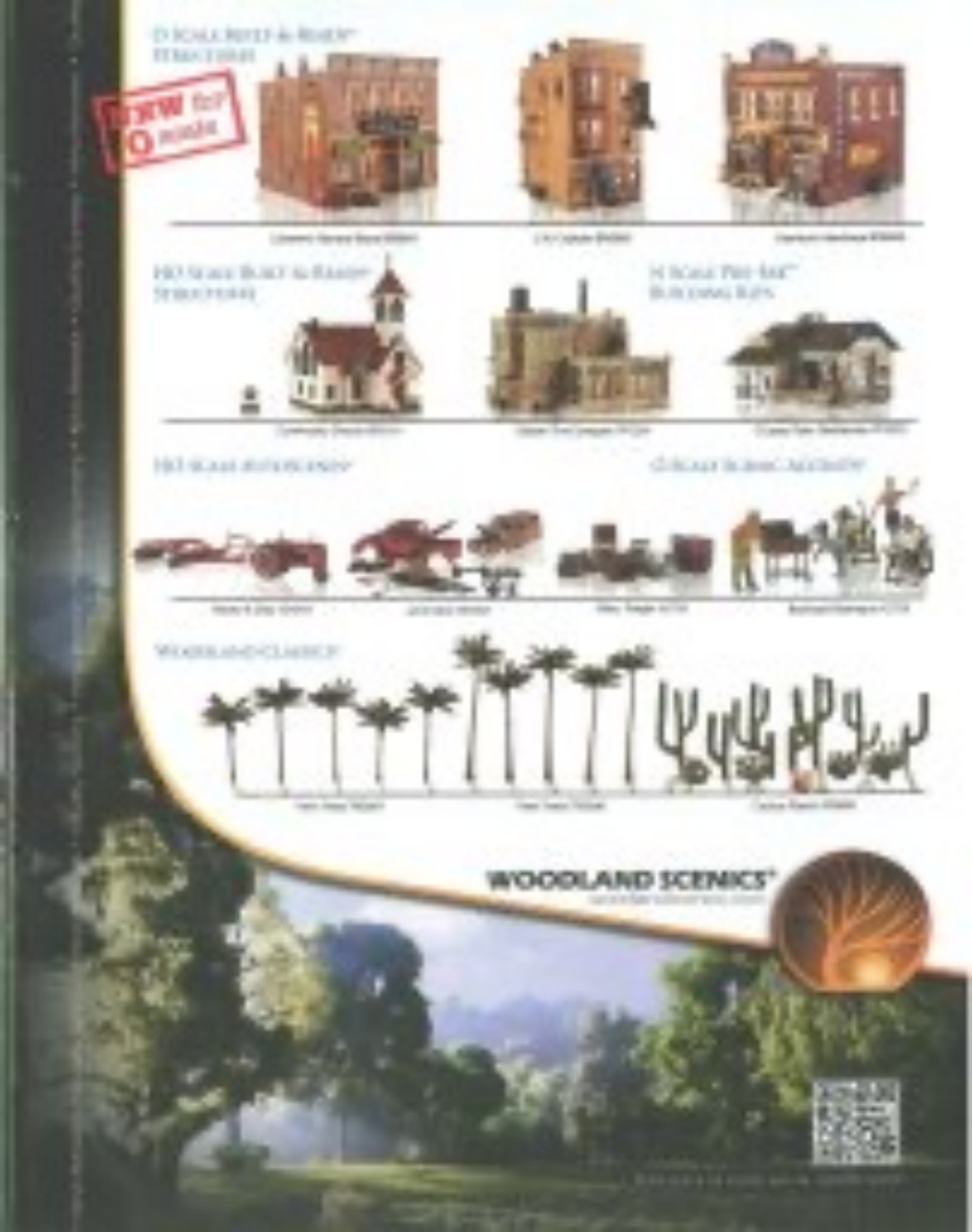
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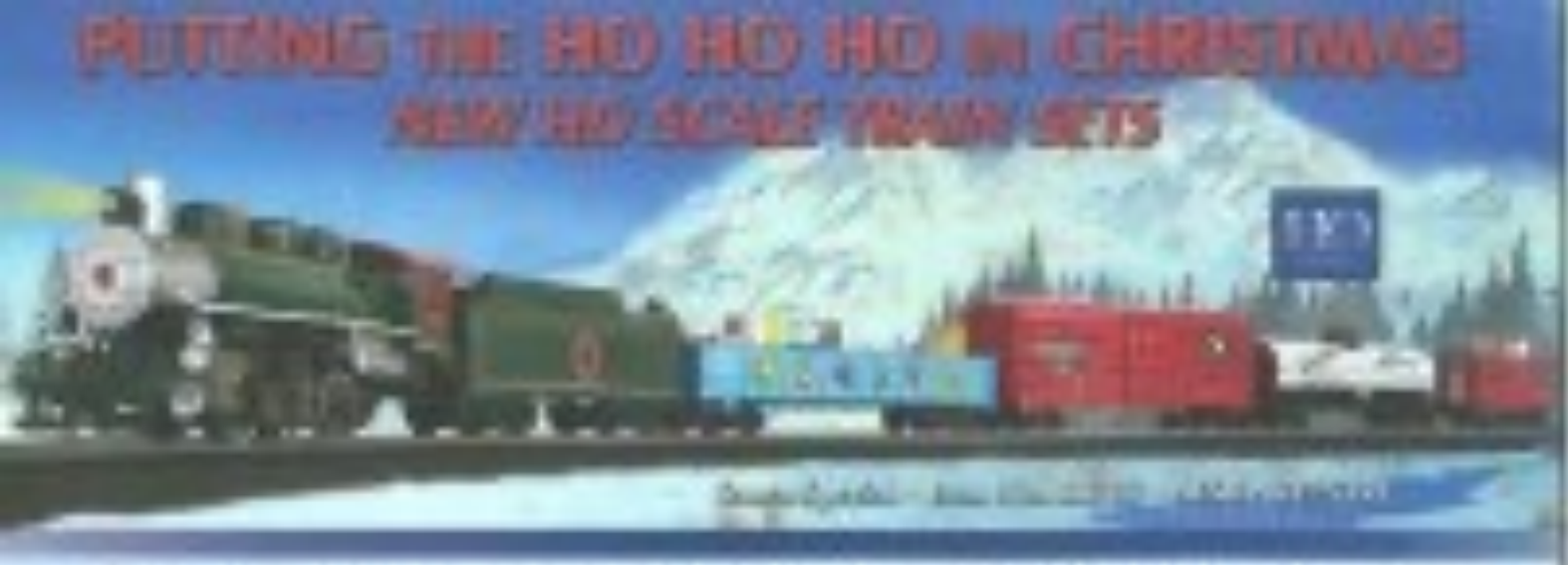

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